August 14, 2002

Mr. Eric Larson Clark Station No. 1972 601 South Main Street Ann Arbor, Michigan 48104

Re: Exempt Construction and Operation Status, 097-16117-00432

Dear Mr. Larson

The application from Clark Retail Enterprises, received on June 17 2002, has been reviewed. Based on the data submitted and the provisions in 326 IAC 2-1.1-3, it has been determined that the following soil and groundwater remediation system located at 9150 East 21<sup>st</sup> Street Indianapolis, Indiana, is classified as exempt from air pollution permit requirements:

The source consists of the following process/equipment:

- (A) High Vacuum pump: Pump has a stack 12 feet above ground level and a diameter of .33 feet. Normal rate of soil vapor per hour is 1,048 lbs. with a maximum of 1,710 soil vapor/hr. The pump has a gas flow rate 232.8 acfm.
- (B) Air Stripper: Air stripper has a stack 12 feet above ground level and a diameter of .33 feet. Normal rate of groundwater extraction is 827lbs per hour with a maximum of 4867 lbs. groundwater per hour. The air stripper has a gas flow rate of 405 acfm.

Pursuant to 326 IAC 2-1.1-3 (d)(1)(H), sources emitting one(1) ton per year of a single hazardous air pollutant (HAP) or two and one-half (2.5) tons per year of any combination of HAPs listed pursuant to section 112(b) of the CAA are exempt from the registration and permitting requirements of 326 IAC 2.

The following conditions shall be applicable:

- (1) Pursuant to 326 IAC 5-1-2 (Opacity Limitations) except as provided in 326 IAC 5-1-3 (Temporary Exemptions), opacity shall meet the following:
  - (a) Opacity shall not exceed an average of thirty percent (30%) in any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.
  - (b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of 15 minutes (60 readings) in a 6-hour period as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuos opacity monitor in a six (6) hour period.

This exemption is the first air approval issued to this source. The source may operate according to 326 IAC 2-5.1-1

An application or notification shall be submitted in accordance with 326 IAC 2 to the Office of Air Management (OAM) if the source proposes to construct new emission units, modify existing emission units, or otherwise modify the source. If you have any questions, please feel free to contact John Mejaski 327-2275

Sincerely, Original Signed by John B. Chavez John B. Chavez, Administrator Office of Environmental Services

jm

cc: file (2 copies)

Mindy Hahn, IDEM

# Indiana Department of Environmental Management Office of Air Quality And City of Indianapolis Office of Environmental Services

# **Technical Support Document (TSD) for an Exemption**

# **Source Background and Description**

Source Name: Clark Station

Source Location: 9150 East 21st Street

County: Marion SIC Code: 5541

Operation Permit No.: 097-16117-00432

Permit Reviewer: J. Mejaski

The City of Indianapolis Office of Environmental Services (OES) and the Office of Air Quality (OAQ), have reviewed an application for an exemption, from Clark Retail Enterprises relating to the remediation of soil and groundwater.

The remediation process will involve emissions from an air stripper and high vacuum pump. The emission from both pieces of equipment will contain hazardous air pollutants. However, through the application process for this remediation, Clark Retail Enterprises has submitted justification that the remediation actives do not meet the criteria for air permit and thus, should receive an exemption.

This remediation project will be reviewed/permitted as an exemption.

# **Proposed Emission Unit**

The source consists of the following process/equipment:

- (a) High Vacuum pump: Pump has a stack 12 feet above ground level and a diameter of .33 feet. Normal rate of soil vapor per hour is 1,048 lbs. with a maximum of 1,710 soil vapor/hr. The pump has a gas flow rate 232.8 acfm.
- (b) Air Stripper: Air stripper has a stack 12 feet above ground level and a diameter of .33 feet. Normal rate of groundwater extraction is 827lbs per hour with a maximum of 4867 lbs. groundwater per hour. The air stripper has a gas flow rate of 405 acfm.

# **Existing Approvals**

There are no existing approvals issued to this source.

#### **Stack Summary**

Stack ID	Operation	Height	Diameter	Flow Rate	Temperature
High-vacuum Pump	Soil Vapor (air)	12	0.33	232.8	200
Air Stripper	Soil Vapor (water)	12	0.33	405	70

<sup>\*</sup>These emissions do not mix with other stacks.

#### **Enforcement Issue**

There are no enforcement actions pending.

# Recommendation

The staff recommends to the Administrator that the Exemption be approved. This recommendation is based on the following facts and conditions:

Unless otherwise stated, information used in this review was derived from the application and additional information submitted by the applicant.

An application for the purposes of this review was received on June 14, 2002. No additional information was received.

#### **Potential To Emit**

Pursuant to 326 IAC 2-1.1-1(16), Potential to Emit is defined as "the maximum capacity of a stationary source to emit any air pollutant under its physical and operational design. Any physical or operational limitation on the capacity of a source to emit an air pollutant, including air pollution control equipment and restrictions on hours of operation or type or amount of material combusted, stored, or processed shall be treated as part of its design if the limitation is enforceable by the U. S. EPA, the department, or the appropriate local air pollution agency".

The following table reflects the existing source potential to emit. Control equipment is not considered federally enforceable until it has been required in a federally enforceable permit:

Pollutant	Potential To Emit (tons/year)	
PM	0.0	
PM-10	0.0	
SO <sub>2</sub>	0.0	
VOC	0.92	
СО	0.0	
NO <sub>x</sub>	0.0	

HAPs	
	PTE
	(tons/year)
Benzene	0.228
Toluene	0.314
Ethyl benzene	0.021
Xylene	0.222
Total VOC and HAP (tons/yr)	0.920

\* The high-vacuum remediation system began operation March 20, 2002. These calculations are based on the worst case VOC concentrations detected during the initial system-monitoring period. A concentration of half the reporting limit was used for concentrations, which were reported as nondetect.

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- (a) The potential to emit (as defined in 326 IAC 2-7-1(29)) of any regulated pollutant is less than 100 tons per year. Therefore, the source is not subject to the provisions of 326 IAC 2-7.
- (b) The potential to emit (as defined in 326 IAC 2-7-1(29)) of any single HAP is less than ten (10) tons per year and the potential to emit (as defined in 326 IAC 2-7-1(29)) of any combination HAPs is less than or equal to twenty-five (25) tons per year. Therefore, the source is not subject to the provisions of 326 IAC 2-7.
- (c) Pursuant to 326 IAC 2-1.1-3 (d)(1)(H), sources emitting one (1) ton per year of a single hazardous air pollutant (HAP) or two and one-half (2.5) tons per year of any combination of HAPs listed pursuant to section 112(b) of the CAA are exempt from the registration and permitting requirements of 326 IAC 2.
- (d) Since this type of operation is not one of the twenty-eight (28) listed source categories under 326 IAC 2-2 and since there are no applicable New Source Performance Standards that were in effect on August 7, 1980, the fugitive particulate matter (PM) and volatile organic compound (VOC) emissions are not counted toward determination of PSD and Emission Offset applicability.

#### **Actual Emissions**

No previous emission data has been received from the source to be operated at 9150 East 21st Street.

# **County Attainment Status**

The source is located in Marion County.

Pollutant	Status
PM-10	attainment
SO <sub>2</sub>	maintenance attainment
NO <sub>2</sub>	attainment
Ozone	maintenance attainment
СО	attainment
Lead	unclassifiable

- (a) Volatile organic compounds (VOC) are precursors for the formation of ozone. Therefore, VOC emissions are considered when evaluating the rule applicability relating to the ozone standards. Marion County has been designated as attainment or unclassifiable for ozone. Therefore, VOC emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2 and 40 CFR 52.21.
- (b) Marion County has been classified as attainment or unclassifiable for PM10,  $SO_2$ ,  $NO_x$ , Ozone, CO and lead. Therefore, these emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2 and 40 CFR 52.21.
- (c) Since this type of operation is not one of the 28 listed source categories under 326 IAC 2-2, 40 CFR 52.21, or 326 IAC 2-3 and since there are no applicable New Source Performance Standards that were in effect on August 7, 1980, the fugitive particulate matter (PM) and

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volatile organic compound (VOC) emissions are not counted toward determination of PSD and Emission Offset applicability.

#### **Source Status**

New Source PSD Definition (emissions after controls, based on 8,760 hours of operation per year at rated capacity and/ or as otherwise limited):

Pollutant	Emissions (ton/yr)	
PM	N/A	
PM10	N/A	
SO <sub>2</sub>	N/A	
VOC	0.920	
со	N/A	
NO <sub>x</sub>	N/A	
Single HAP	0.808	
Combination HAPs	0.920	

(a) This new source is not a major stationary source because no attainment pollutant is emitted at a rate of 250 tons per year or greater and it is not in one of the 28 listed source categories. Therefore, pursuant to 326 IAC 2-2, and 40 CFR 52.21, the PSD requirements do not apply.

#### **Part 70 Permit Determination**

326 IAC 2-7 (Part 70 Permit Program)

This new source is not subject to the Part 70 Permit requirements because the potential to emit (PTE) of:

- (a) Each criteria pollutant is less than 100 tons per year,
- (b) A single hazardous air pollutant (HAP) is less than 10 tons per year, and
- (c) Any combination of HAPs is less than 2.5 tons/year.

This is the first air approval issued to this source at this location.

# **Federal Rule Applicability**

- (a) There are no New Source Performance Standards (NSPS)(326 IAC 12 and 40 CFR Part 60) applicable to this source.
- (b) There are no National Emission Standards for Hazardous Air Pollutants (NESHAPs)(326 IAC 14 and 40 CFR part 63) applicable to this source.

# State Rule Applicability - Entire Source

#### 326 IAC 1-6-3 (Preventive Maintenance Plan)

Only sources required to obtain a permit are required to prepare and maintain a Preventive Maintenance Plan (PMP). The potential to emit regulated air pollutants appears to be below any minimum permitting threshold or permitting provisions found in 326 IAC 2-1.1-2 (Permit Review Rules: General Provisions; Applicability) and or 326 IAC 2-5.1 (Construction of New Sources).

#### 326 IAC 2-4.1(HAPs Major Sources; New Source Toxics Control)

The source has the potential to emit of less than ten (10) tons per year of single HAP and less than twenty-five (25) tons per year of any combination of HAPs. Therefore 326 IAC 2-4.does not apply

#### 326 IAC 2-6 (Emission Reporting)

This source is not subject to 326 IAC 2-6 (Emission Reporting), because it has the potential to emit less than ten (10) tons per year of  $NO_x$  and/or VOC in Marion County and less that one hundred (100) tons per year of Particulate Matter (PM). In addition, the potential to emit HAPs is less than any major source threshold and, as such, is not required to obtain a permit under 326 IAC 2-7 (Part 70 Permit Program). As a result, 326 IAC 2-6 (Emission Reporting) does not apply.

# 326 IAC 5-1 (Visible Emissions Limitations)

Pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-3 (Temporary Exemptions), opacity shall meet the following, unless otherwise stated in this permit:

- (a) Opacity shall not exceed an average of thirty percent (30%) any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.
- (b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings) as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor) in a six (6) hour period.

#### 326 IAC 6 (Particulate Rules)

- (a) This source does not have the potential to emit Particulate Matter (PM) in excess of one hundred (100) tons per year or have actual PM emissions of greater than ten (10) tons per year. Therefore, 326 IAC 6-1 does not apply to this source.
- (b) 326 IAC 6-3 Applicability. This rule establishes emission limitations for particulate emissions from process operations located anywhere in the state. This source does not have particulate emissions. Therefore, 326 IAC 6-3 does not apply to this source

# 326 IAC 7 (Sulfur Dioxide Rules)

This source does not have any emission unit with the potential to emit twenty five (25) tons per year or ten (10) pounds per hour of sulfur dioxide. Therefore, 326 IAC 7 does not apply to this source.

#### 326 IAC 8 (Volatile Organic Compound Rules)

- (a) The potential to emit of the vacuum pump and air stripping emission units and is less than 25 tons per year therefore, 326 IAC 8-1-6 does not apply.
- (b) There are no specific 326 IAC 8 rules applicable to source.

#### Conclusion

The remediation project proposed for 9150 East 21<sup>st</sup> Street shall be subject to the conditions of the attached exemption number 097-16117-00432.